



## P2 in Shops: A Case Study Franklin's P2 Challenge

*Franklin Marshall has been tasked with reducing waste in his automotive maintenance shop. He has read all of the Installation pollution prevention policies, so he knows that pollution prevention is the preferred approach to environmental management at Aberdeen Proving Ground, but unfortunately has never attended a Directorate of Safety, Health and Environment (DSHE) pollution prevention class. You, as a newly trained pollution prevention specialist, have been assigned to assist him on this project.*

**During your first meeting, Franklin takes you on a tour of his hazardous material storage areas. During this tour you find that:**

1. Each area of the shop stores its own hazardous materials in closed flammability lockers.
2. The MSDS binder is readily available and appears to be complete and current.
3. Two of the lockers contain expired products and a few empty containers.
4. All of the products have HITS barcodes.
5. There are some duplicate products stocked in each locker.

**During your second meeting Franklin takes you to meet the individual shop managers. During these interviews you discover that:**

1. Shop Area 1 works on vehicles from private companies who have hired APG to conduct vehicle tests. As a result, this shop often receives more hazardous materials than is needed for that particular contract.
2. Shop Area 1 employs the use of an aqueous parts washer for degreasing.
3. Shop Area 2 uses aerosol WD40, aerosol glass cleaner and aerosol spray paints that contain lead and chrome.
4. Shop Area 2 rewards its workers for finding cost effective ways to minimize pollution and operating costs.
5. Shop Area 3 recycles their oily rags, used oil and they maintain a large inventory of re-refined oil.
6. Shop Area 3 paints vehicles, using an approved paint spray booth, but they don't have a systematic way of batching paint jobs by color.
7. Shop Area 3 has a large cylinder storage area that is no longer serviced, but still has both empty and full cylinders.
8. None of the shop managers have a Hazardous Inventory Tracking System (HITS) account.

**During your third meeting, Franklin reviews his SOPs with you. You find that:**

1. The SOPs are eight years old.
2. The equipment is even older (types of equipment in stock: hydraulic lift, paint guns, parts washer, etc).
3. There is no one person designated to review hazardous product purchases (types of materials purchased: solvents, paints, chemicals, etc).
4. Before unused chemical products expire, and are disposed of, some shop managers ask their colleagues if they have a use for them.
5. Some metal parts are cleaned using a dipping process into a hazardous material (solvent) multiple times a day, using a new container each time.
6. Where possible, the shop's best management practices require that hazardous materials use be minimized, if not eliminated, in an effort to increase worker health and safety, decrease cost and reduce wastes.

**Where are the shop areas preventing pollution?**

**Is there room for improvement?**

**What can Franklin do to help APG shops prevent more pollution?**

